Welcome to STN International! Enter x:x

LOGINID: SSPTANXR1625

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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LMEDLINE coverage updated
NEWS
         JUL 02
                 SCISEARCH enhanced with complete author names
         JUL 02
NEWS
     3
                 CHEMCATS accession numbers revised
         JUL 02
NEWS
                 CA/CAplus enhanced with utility model patents from China
         JUL 02
NEWS
                 CAplus enhanced with French and German abstracts
         JUL 16
NEWS
         JUL 18
                 CA/CAplus patent coverage enhanced
NEWS
                 USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 8
         JUL 26
NEWS 9
         JUL 30
                 USGENE now available on STN
                 CAS REGISTRY enhanced with new experimental property tags
NEWS 10
         AUG 06
         AUG 06
                 BEILSTEIN updated with new compounds
NEWS 11
         AUG 06
                 FSTA enhanced with new thesaurus edition
NEWS 12
         AUG 13
                 CA/CAplus enhanced with additional kind codes for granted
NEWS 13
                 patents
NEWS 14
         AUG 20
                 CA/CAplus enhanced with CAS indexing in pre-1907 records
                 Full-text patent databases enhanced with predefined
NEWS 15
         AUG 27
                 patent family display formats from INPADOCDB
NEWS 16
         AUG 27
                 USPATOLD now available on STN
                 CAS REGISTRY enhanced with additional experimental
NEWS 17
         AUG 28
                 spectral property data
                 STN AnaVist, Version 2.0, now available with Derwent
NEWS 18
         SEP 07
                 World Patents Index
         SEP 13
                 FORIS renamed to SOFIS
NEWS 19
         SEP 13
                 INPADOCDB enhanced with monthly SDI frequency
NEWS 20
         SEP 17
                 CA/CAplus enhanced with printed CA page images from
NEWS 21
                 1967-1998
                 CAplus coverage extended to include traditional medicine
NEWS 22
         SEP 17
                 patents
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
         SEP 24
NEWS 23
                 CA/CAplus enhanced with pre-1907 records from Chemisches
         OCT 02
NEWS 24
                 Zentralblatt
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NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

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\* \* \* \* \* \* \* \* \* \* \* \* \* \* STN Columbus

FILE 'HOME' ENTERED AT 16:45:45 ON 17 OCT 2007

=> file reg COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 16 OCT 2007 HIGHEST RN 950817-67-1 DICTIONARY FILE UPDATES: 16 OCT 2007 HIGHEST RN 950817-67-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\Stnexp\Queries\10565181.str

chain nodes : 39 9 10 11 12 26 27 28 29 30 31 32 33 34 35 36 37 38 43 44 45 ring nodes : 16 17 18 15 3 chain bonds : 6-36 7-44 7-45 8-42 8-43 3-39 3-40 4-41 5-9 6-35 2-37 2-38 18-27 19-26 21-30 22-31 23-32 15-29 16-28 17-20 10-11 10-14

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:CLASS 10:CLASS 11:CLASS 12:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:CLASS 40:CLASS 41:CLASS 42:CLASS 43:CLASS 44:CLASS 45:CLASS

#### L1 STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS L1 STR

Match level :

Structure attributes must be viewed using STN Express query preparation.

=> s 11
SAMPLE SEARCH INITIATED 16:46:21 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 7 TO ITERATE

100.0% PROCESSED 7 ITERATIONS SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 7 TO 298
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 full FULL SEARCH INITIATED 16:46:26 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 168 TO ITERATE

100.0% PROCESSED 168 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

=> log y

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
172.10
172.31

STN INTERNATIONAL LOGOFF AT 16:46:32 ON 17 OCT 2007

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LOGINID: SSPTANXR1625

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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                 Web Page for STN Seminar Schedule - N. America
NEWS
NEWS
         JUL 02
                 LMEDLINE coverage updated
NEWS
         JUL 02
                 SCISEARCH enhanced with complete author names
NEWS
         JUL 02
                 CHEMCATS accession numbers revised
         JUL 02 CA/CAplus enhanced with utility model patents from China
NEWS
         JUL 16 CAplus enhanced with French and German abstracts
NEWS
NEWS
         JUL 18 CA/CAplus patent coverage enhanced
NEWS
         JUL 26
                 USPATFULL/USPAT2 enhanced with IPC reclassification
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        AUG 06
                 CAS REGISTRY enhanced with new experimental property tags
NEWS 10
        AUG 06
NEWS 11
                 BEILSTEIN updated with new compounds
NEWS 12
         AUG 06
                 FSTA enhanced with new thesaurus edition
                 CA/CAplus enhanced with additional kind codes for granted
NEWS 13
        AUG 13
                 patents
NEWS 14
         AUG 20
                 CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 15
         AUG 27
                 Full-text patent databases enhanced with predefined
                 patent family display formats from INPADOCDB
NEWS 16
        AUG 27
                 USPATOLD now available on STN
NEWS 17
        AUG 28
                 CAS REGISTRY enhanced with additional experimental
                 spectral property data
NEWS 18
         SEP 07
                 STN AnaVist, Version 2.0, now available with Derwent
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NEWS 19
         SEP 13
                 FORIS renamed to SOFIS
NEWS 20
         SEP 13
                 INPADOCDB enhanced with monthly SDI frequency
NEWS 21
         SEP 17
                 CA/CAplus enhanced with printed CA page images from
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NEWS 22
         SEP 17
                 CAplus coverage extended to include traditional medicine
                 patents
NEWS 23
         SEP 24
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 24
         OCT 02
                 CA/CAplus enhanced with pre-1907 records from Chemisches
                 Zentralblatt
              19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,
NEWS EXPRESS
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
              Welcome Banner and News Items
NEWS IPC8
              For general information regarding STN implementation of IPC 8
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result in loss of user privileges and other penalties.

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=> FILE REG

COST IN U.S. DOLLARS

SINCE FILE TOTAL .
ENTRY SESSION
0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 16:47:45 ON 17 OCT 2007
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STRUCTURE FILE UPDATES: 16 OCT 2007 HIGHEST RN 950817-67-1 DICTIONARY FILE UPDATES: 16 OCT 2007 HIGHEST RN 950817-67-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

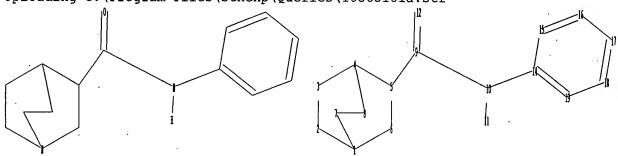
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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chain nodes:

9 10 11 12

ring nodes :

1 2 3 4 5 6 7 8 14 15 16 17 18 19

chain bonds :

5-9 9-10 9-12 10-11 10-14

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 .4-8 5-6 7-8 14-15 14-19 15-16 16-17 17-18

exact/norm bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-8 5-6 7-8 9-10 9-12 10-14

exact bonds :

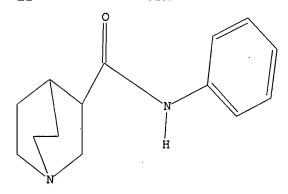
5-9 10-11 normalized bonds: 14-15 14-19 15-16 16-17 17-18 18-19 isolated ring systems: containing 1: 14:

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:CLASS 10:CLASS 11:CLASS 12:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom

L1 STRUCTURE UPLOADED

=> d 11 L1 HAS NO ANSWERS L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 16:48:05 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 370 TO ITERATE

100.0% PROCESSED 370 ITERATIONS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

3 TO

PROJECTED ITERATIONS:

6246 TO 8554

163

PROJECTED ANSWERS:

L2 3 SEA SSS SAM L1

=> s 11 full

FULL SEARCH INITIATED 16:48:11 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 7586 TO ITERATE

100.0% PROCESSED 7586 ITERATIONS

80 ANSWERS

3 ANSWERS

SEARCH TIME: 00.00.01

L3 80 SEA SSS FUL L1

=> file caplus'
'CAPLUS'' IS NOT A VALID FILE NAME
SESSION CONTINUES IN FILE 'REGISTRY'

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 172.10 172.31

FULL ESTIMATED COST

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FILE COVERS 1907 - 17 Oct 2007 VOL 147 ISS 17 FILE LAST UPDATED: 16 Oct 2007 (20071016/ED)

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http://www.cas.org/infopolicy.html

=> s 13 full

L4. 14 L3

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ANSWER 1 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN **L4** 

ACCESSION NUMBER: 2007:874444 CAPLUS

DOCUMENT NUMBER:

147:257789

TITLE:

4-Aryl-2-aminopyrimidines or 4-aryl-2-

aminoalkylpyrimidines as JAK-2 modulators and their preparation, pharmaceutical compositions and use in

the treatment of diseases

INVENTOR(S):

Mann, Grace; Aay, Naing; Arcalas, Arlyn; Brown, S. David; Chan, Wai Ki Vicky; Chen, Jeff; Du, Hongwang; Epshteyn, Sergey; Forsyth, Timothy; Galan, Adam A.; Huynh, Tai Phat; Ibrahim, Mohamed Abdulkader; Johnson, Henry William Beecroft; Kane, Brian; Kearney, Patrick; Kim, Byung Gyu; Koltun, Elena; Leahy, James William; Lee, Matthew Sangyup; Lewis, Gary L.; Meyr, Lisa E.; Noguchi, Robin Tammie; Pack, Michael; Ridgway, Brian

Hugh; Shi, Xian; Woolfrey, John; Zhou, Peiwen

PATENT ASSIGNEE(S):

SOURCE:

Exelixis, Inc., USA PCT Int. Appl., 586pp., which which

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

1 ·

FAMILY ACC. NUM. COUNT:

· PATENT INFORMATION:

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			GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,
			KP,	KR,	KZ,	LΑ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,
			MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
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			GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
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\end{array}$$

AΒ This invention relates to certain pyrimidine derivative inhibitors of JAK-2, having formula I, pharmaceutically acceptable salts thereof, pharmaceutical compns. thereof, and methods of use thereof. Compds. of formula I wherein D and E are independently H, halo, CF3, heterocycloalkyl and alkyl; DE taken together to form 5- to 7-membered heteroaryl and 5- to 7-membered heterocycloalkyl; L is a bond, O and NH; Z is alkoxyl, cycloalkyl, (un) substituted heteroaryl, aryl, (un) substituted heterocycloalkyl; Z-R25 taken together to form 5- to 6-membered (hetero)cycloalkyl, and 5- to 6-membered heteroaryl; n is 0, 1, 2, 3, and 4; R1 is H; R2 is (un) substituted (hetero) aryl, (un) substituted alkylaryl; R25 is alkyl, alkenyl, halo, haloalkyl, amino, etc.; and their pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by cross-coupling of 2,4-dichloropyrimidine with 4-(acetylamino)phenylboronic acid; the resulting N-[4-(2-chloropyrimidin-4yl)phenyl]acetamide underwent amination with N-Boc-1,3-diaminobenzene to give compound II. All the invention compds. were evaluated for their JAK-2

ΙI

inhibitory activity.

IT 945750-35-6P

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of aryl(amino)pyrimidines and aryl(aminoalkyl)pyrimidines as JAK-2 modulators useful in the treatment of diseases)

945750-35-6 CAPLUS RN

1-Azabicyclo[2.2.2]octane-3-carboxamide, 6-(hydroxymethyl)-N-[4-[2-[[4-(4-CN morpholinyl)phenyl]amino]-4-pyrimidinyl]phenyl]-, (3S,6S)- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:120928 CAPLUS

DOCUMENT NUMBER:

142:198251

TITLE:

Preparation of quinuclidine N-biarylamides for use in

treatment and/or prophylaxis of diseases

INVENTOR(S):

Flessner, Timo; Boess, Frank-Gerhard; Hafner, Frank-Thorsten; Luithle, Joachim; Methfessel,

Christoph; Telan, Leila

PATENT ASSIGNEE(S):

Bayer Healthcare AG, Germany

SOURCE:

PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent German

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚĒ,	KG,	ΚP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ.	NA.	NI.

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            NO, NZ, OM, PG, PH, FL, PI, RO, RO, SC, SD, SE, SG, SR, SL, SI, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
                  SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
                  SN, TD, TG
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                                              20070221
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                                              20070517
                                                               US 2006-565181
                                                                                                20061016
PRIORITY APPLN. INFO.:
                                                               DE 2003-10334724
                                                                                            Α
                                                                                                20030730
                                                               WO 2004-EP8037
                                                                                                20040719
                                   CASREACT 142:198251; MARPAT 142:198251
OTHER SOURCE(S):
GΙ
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#### \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to N-biarylamides I [R1 = NR2CONR3R4, NR2COCO2R5, NHSO2R6, SO2NHR7, NHCOR8; R2 = H, C1-6-alkyl; R3, R4 = H, C1-6-alkyl, C3-8-cycloalkyl, Ph (optionally substituted with up to three residues from the group halogen, CN, C1-6-alkyl, C1-6-alkoxy, CF3, OCF3); NR3R4 = 5- or 6-membered ring; R5 = H, C1-6-alkyl, C3-8-cycloalkyl, aryl, aryl-(C1-6-alkyl), R6 = C1-6-alkyl, C3-8-cycloalkyl, 5- or 6-membered heterocycle or heteroaryl, aryl-(C1-6-alkyl); R7 = C1-6-alkyl, C3-8-cycloalkyl, aryl, 5- or 6-membered heterocycle or heteroaryl, aryl-(C1-6-alkyl); R8 = C1-6-alkyl, C3-8-cycloalkyl, Ph, Ph-(C1-6-alkyl), (C1-6-alkoxy)-(C1-6-alkyl), (optionally substituted with up to three residues from the group halogen, CN, C1-6-alkyl, C1-6-alkoxy, CF3, OCF3)], their salts, solvates and salt solvates, methods for their production and use thereof for the production of medicaments for the treatment and/or prophylaxis of diseases and for improvement in cognition, concentration power, learning power

and/or memory. Procedure for the preparation of I comprises: amidation of quinuclidine II [X = OH, Cl, OC6F5] with amines III or IV [Y = triflate, halogen (especially Br or I)]; with the latter, intermediate V is formed and is coupled with boronic acid VI [R9 = H, Me; (R9)2 = CH2CH2, CMe2CMe2] in an inert solvent containing a catalyst and a base. Thus, I·HCl [R1 = NHSO2Me-4] was prepared from quinuclidin-3-one via deoxidative cyanation, chromatog. resolution, hydrolysis, carbonyl chlorination and amidation with 4-(4-H2NC6H4)C6H4NHSO2Me. The binding ability of I·HCl [R1 = NHSO2Me-4] towards  $7\alpha-n$  acetylcholine receptor was determined [Ki = 2 nM].

IT 838852-86-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and acylation, sulfonation or carbamylation of; preparation of quinuclidine N-biarylamides for use in treatment and/or prophylaxis of diseases)

RN 838852-86-1 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(3'-amino[1,1'-biphenyl]-4-yl)-, dihydrochloride, (3R)- (9CI) (CA INDEX NAME)

IT 838852-85-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and acylation, sulfonylation or carbamylation of; preparation

of

quinuclidine N-biarylamides for use in treatment and/or prophylaxis of diseases)

RN 838852-85-0 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(4'-amino[1,1'-biphenyl]-4-yl)-, dihydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# ●2 HC1

IT 604803-85-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and coupling reactions of, with boronates; preparation of quinuclidine N-biarylamides for use in treatment and/or prophylaxis of diseases)

RN 604803-85-2 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(4-bromophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

IT 838852-84-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and hydrogenolysis of; preparation of quinuclidine N-biarylamides

for use in treatment and/or prophylaxis of diseases)

RN 838852-84-9 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(4'-nitro[1,1'-biphenyl]-4-yl)-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

#### ● HCl

838852-67-8P 838852-68-9P 838852-69-0P IT 838852-70-3P 838852-71-4P 838852-72-5P 838852-73-6P 838852-74-7P 838852-75-8P 838852-76-9P 838852-77-0P 838852-78-1P 838852-79-2P 838852-80-5P 838852-81-6P 838852-82-7P 838852-83-8P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of quinuclidine N-biarylamides for use in treatment and/or prophylaxis of diseases) 838852-67-8 CAPLUS 'RΝ CN Acetic acid, [[4'-[[(3R)-1-azabicyclo[2.2.2]oct-3-ylcarbonyl]amino][1,1'biphenyl]-4-yl]amino]oxo-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 838852-68-9 CAPLUS
CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'[(methylsulfonyl)amino][1,1'-biphenyl]-4-yl]-, monohydrochloride, (3R)(9CI) (CA INDEX NAME)

Absolute stereochemistry.

# ● HCl

RN 838852-69-0 CAPLUS
CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[3'[(methylsulfonyl)amino][1,1'-biphenyl]-4-yl]-, monohydrochloride, (3R)(9CI) (CA INDEX NAME)

# ● HCl

RN 838852-70-3 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-[(ethylsulfonyl)amino][1,1'-biphenyl]-4-yl]-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## HCl

RN 838852-71-4 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'[(phenylsulfonyl)amino][1,1'-biphenyl]-4-yl]-, monohydrochloride, (3R)(9CI) (CA INDEX NAME)

## HCl.

RN 838852-72-5 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'[[(phenylmethyl)sulfonyl]amino][1,1'-biphenyl]-4-yl]-, monohydrochloride,
(3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# ● HCl

RN 838852-73-6 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## HCl

RN 838852-75-8 CAPLUS
CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4' [[(phenylmethyl)amino]sulfonyl][1,1'-biphenyl]-4-yl]-, monohydrochloride,
 (3R)- (9CI) (CA INDEX NAME)

RN 838852-76-9 CAPLUS
CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'[[(methylamino)carbonyl]amino][1,1'-biphenyl]-4-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 838852-77-0 CAPLUS
CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'[[(cyclopentylamino)carbonyl]amino][1,1'-biphenyl]-4-yl]-,
monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

RN 838852-78-1 CAPLUS
CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4' [[(ethylamino)carbonyl]amino][1,1'-biphenyl]-4-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 838852-79-2 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-[[[(3-methoxyphenyl)amino]carbonyl]amino][1,1'-biphenyl]-4-yl]-,
monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

'RN 838852-80-5 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-[(3-chlorobenzoyl)amino][1,1'-biphenyl]-4-yl]-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 838852-81-6 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-[(3-fluorobenzoyl)amino][1,1'-biphenyl]-4-yl]-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

RN 838852-82-7 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-[(methoxyacetyl)amino][1,1'-biphenyl]-4-yl]-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RN 838852-83-8 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'[(cyclopentylcarbonyl)amino][1,1'-biphenyl]-4-yl]-, monohydrochloride,
(3R)- (9CI) (CA INDEX NAME)

## HC1

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:757707 CAPLUS

DOCUMENT NUMBER:

139:277050

TITLE:

Preparation of aza-bicyclic N-biarylamides with

affinity for the  $\alpha$ 7-nicotinic acetylcholine

receptor

INVENTOR(S):

Luithle, Joachim; Boess, Frank-Gerhard; Erb, Christina; Schnizler, Katrin; Flessner, Timo; Van

Kampen, Marja; Methfessel, Christoph; Hafner,

Frank-Thorsten

PATENT ASSIGNEE(S):

SOURCE:

Bayer Aktiengesellschaft, Germany

PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT	NO.	ŧ		KIN	D	DATE			APPL	ICAT	ION	NO.		- D	ATE	
WO	200	30784	31		. A1	_	2003	 0925	,	 WO 2	003-	 EP21	 53		2	0030	303
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
							SD,										
		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw						-
	RW	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	ĒE,	ES,
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
DE	102	11415			<b>A</b> 1		2003	0925		DE 2	002-	1021	1415		2	0020	315
CA	2479	9103					2003			CA 2	003-	2479	103		2	0030	303
AU	2003	32122					2003	0929	1	AU 2	003-	2122	96		2	0030	303
EP	148	7834			A1		2004	1222		EP 2	003-	7081	68		2	0030	303
EP	148	7834			B1		2007	0425									

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK JP 2005524675 20050818 JP 2003-576436 US 2005154045 A1 20050714 US 2005-508108 20050303 US 7138410 20061121 PRIORITY APPLN. INFO .: DE 2002-10211415 20020315 Α WO 2003-EP2153 20030303 OTHER SOURCE(S): MARPAT 139:277050

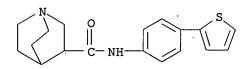
Ι

CH<sub>2</sub>OH

AB The azabicyclic N-arylamides, R1AC(:0)NR3ER3 [R1 = 1azabicyclo[m.n.p]alkyl (7 - 11 ring atoms, optionally substituted with C1-6-alkyl); m, n = 2, 3; p = 1, 2, 3; A = CH2, CH2CH2, propylene; E = 5-6 membered heteroaryl of benzenediyl optionally substituted with halo, cyano, F3C, F3CO, C1-6-alkyl; R2 = 5-6 membered heteroaryl, Ph, optionally substituted with halo, heterocyclyl, carbamoyl, carboxylate, amino, acyl, CN, CF3, CF30, NO2, C1-6-alkyl, C1-6-alkoxy, C1-6-alkylthio, etc.; R3 = H, C1-6-alkyl] and their salts, solvates and salt solvates were prepared and used for producing pharmaceuticals for the treatment and/or prophylaxis of diseases and for improving perception, concentration, learning ability and Thus, 2-(1-azabicyclo[2.2.2]octan-3-yl)-N-(3-yl)bromophenyl) acetamide hydrochloride was treated with 4-(hydroxymethyl)phenylboronic acid to give the quinuclidineacetamide derivative The affinity of I for  $\alpha$ 7-nAChR was determined 604803-22-7P 604803-23-8P 604803-24-9P IT 604803-25-0P 604803-34-1P 604803-35-2P 604803-36-3P 604803-37-4P 604803-38-5P 604803-39-6P 604803-40-9P 604803-41-0P 604803-42-1P 604803-44-3P 604803-45-4P 604803-47-6P 604803-49-8P 604803-97-6P 604804-00-4P 604804-02-6P 604804-04-8P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of aza-bicyclic N-biarylamides with affinity for  $\alpha$ -7 nicotinic acetylcholine receptor) RN604803-22-7 CAPLUS

1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4-(2-thienyl)phenyl]-,

monohydrochloride (9CI) (CA INDEX NAME)



CN

● HCl

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-(hydroxymethyl)[1,1'-biphenyl]-4-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HCl

RN 604803-24-9 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(4'-fluoro[1,1'-biphenyl]-4-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

## HCl

RN 604803-25-0 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-(methylthio)[1,1'-biphenyl]-4-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

# ● HCl

RN 604803-34-1 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[2'-(hydroxymethyl)[1,1'-biphenyl]-4-yl]-, (3R)- (CA INDEX NAME)

RN 604803-35-2 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-(hydroxymethyl)[1,1'-biphenyl]-4-yl]-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 604803-36-3 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-(hydroxymethyl)[1,1'-biphenyl]-4-yl]-, monohydrochloride, (3S)- (9CI) (CA INDEX NAME)

RN 604803-37-4 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-(4-morpholinyl)[1,1'-biphenyl]-4-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 604803-38-5 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-(hydroxymethyl)-3'-methoxy[1,1'-biphenyl]-4-yl]-, (3R)- (CA INDEX NAME)

RN 604803-39-6 CAPLUS

CN [1,1'-Biphenyl]-4-carboxylic acid, 4'-[[(3R)-1-azabicyclo[2.2.2]oct-3-ylcarbonyl]amino]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 604803-40-9 CAPLUS

CN [1,1'-Biphenyl]-4-carboxylic acid, 4'-[[(3R)-1-azabicyclo[2.2.2]oct-3-ylcarbonyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

# ● HCl

RN 604803-41-0 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-(1-hydroxy-1-methylethyl)[1,1'-biphenyl]-4-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 604803-42-1 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-(aminocarbonyl)[1,1'-biphenyl]-4-yl]-, hydrochloride, (3R)- (9CI) (CA INDEX NAME)

## •x HCl

RN 604803-44-3 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[3'-fluoro-4'-(hydroxymethyl)[1,1'-biphenyl]-4-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 604803-45-4 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'[[[(methylamino)carbonyl]oxy]methyl][1,1'-biphenyl]-4-yl]-, (3R)- (CA
INDEX NAME)

RN 604803-47-6 CAPLUS

CN Carbamic acid, (1-methylethyl)-, [4'-[[(3R)-1-azabicyclo[2.2.2]oct-3-ylcarbonyl]amino][1,1'-biphenyl]-4-yl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 604803-49-8 CAPLUS

CN Carbamic acid, ethyl-, [4'-[[(3R)-1-azabicyclo[2.2.2]oct-3-ylcarbonyl]amino][1,1'-biphenyl]-4-yl]methyl ester (9CI) (CA INDEX NAME)

'RN 604803-97-6 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4-(2-thienyl)phenyl]-INDEX NAME)

604804-00-4 CAPLUS RN

1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-(hydroxymethyl)[1,1'-CN biphenyl]-4-yl]- (CA INDEX NAME)

604804-02-6 CAPLUS

RN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(4'-fluoro[1,1'-biphenyl]-4-yl)-CN(CA INDEX NAME)

RN604804-04-8 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4'-(methylthio)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

## HC1.

RN 604803-83-0 CAPLUS
CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(4-bromophenyl)-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 604803-85-2 CAPLUS
CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(4-bromophenyl)-, (3R)- (CA INDEX NAME)

604804-18-4 CAPLUS RN

1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(4-bromophenyl)- (CA INDEX CN

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:506550 CAPLUS

DOCUMENT NUMBER:

139:85529

TITLE:

Preparation of monocyclic N-aryl amides for

improvement of the perception and memory enhancement

INVENTOR(S):

Luithle, Joachim; Boess, Frank-Gerhard; Erb,

Christina; Flessner, Timo; Hendrix, Martin; Van

Kampen, Marja; Methfessel, Christoph

PATENT ASSIGNEE(S):

SOURCE:

Bayer AG, Germany

Ger. Offen., 10 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	DE 10162442	A1	20030703	DE 2001-10162442	20011219
	PRIORITY APPLN. INFO.:			DE 2001-10162442	20011219
,	OTHER SOURCE(S):	MARPAT	139:85529		
	CT				

AB The invention concerns the use of monocyclic N-aryl amides, R1CONR2R3 [R1 = 1-azabicyclo[m.n.p]alkyl (7 - 11 ring atoms, optionally substituted with C1-6-alkyl); m, n = 2 , 3; p = 1 - 3; R2 = (un)substituted Ph, 5 to 6-membered heteroaryl (optionally substituted with halogen, CHO, CONH2, CN, CF3,CF3O, NO2, C1-6-alkyl, C1-6-alkoxy, C1-6-alkylthio); R3 = H, C1-6-alkyl] and their salts, solvates and solvate salts, in the production of drugs for the improvement of the perception, concentration achievement,

achievement and/or memory achievement as well as to new monocyclic N-aryl amides. Thus, N-(3-pyridinyl)quinuclidine-3-carboxamide dihydrochloride(I·2HCl) was prepared from quinuclidine-3-carboxylic acid chloride hydrochloride and 3-aminopyridine in DMF containing EtN(CHMe2)2 and catalytic DMAP. The affinity of I for  $\alpha$ 7-nAChR was determined (no data).

IT 552832-93-6P, N-(4-Isopropylphenyl)quinuclidine-3-carboxamide hydrochloride

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of monocyclic N-aryl amides for improvement of the perception and memory enhancement)

RN 552832-93-6 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-[4-(1-methylethyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

L4 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:199358 CAPLUS

DOCUMENT NUMBER: 114:199358

TITLE: EO-199, a specific antagonist of antiarrhythmic drugs:

assessment by binding experiments and in vivo studies

AUTHOR(S): Oppenheimer, Edna; Harel, Gideon; Lipinsky, Dafna;

Sarne, Yosef

CORPORATE SOURCE: Sackler Fac. Med., Tel-Aviv Univ., Ramat-Aviv, 69978,

Israel

SOURCE: Life Sciences (1991), 48(10), 977-85

CODEN: LIFSAK; ISSN: 0024-3205

DOCUMENT TYPE: Journal

ANGUAGE.

LANGUAGE: English

CONH @ HCl

AB EO-199 (I), a demethylated analog of the novel class I antiarrhythmic drug EO-122, was found to antagonize the antiarrhythmic activity of EO-122 and that of procainamide (Class I). EO-199 did not block the activity of a class IB antiarrhythmic agent, lidocaine. EO-199 also displaced the specific binding of [3H]EO-122 to rat heart membranes similarly to procainamide, whereas lidocaine did not. The correlation between binding expts. and pharmacol. effects points to a possible subclassification of these drugs. The 2 chemical analogs EO-199 and EO-122, as well as procainamide (IA) but not lidocaine (IB), compete at the same site or the same state of the sodium channel. The availability of a specific antagonist might be useful for studying the mechanism of action of antiarrhythmic drugs as well as an antidote in cases of antiarrhythmics overdose intoxication.

IT 133658-30-7, EO 199

RL: BIOL (Biological study)

(antiarrhythmic agents antagonism by, poisoning by antiarrhythmics in relation to)

RN 133658-30-7 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(2-methylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

L4 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:69427 CAPLUS

DOCUMENT NUMBER:

112:69427

TITLE:

Molecular modeling studies on class Ia and Ib antiarrhythmics. Model representations for

differentiating binding sites

AUTHOR(S):

Marrer, S.

CORPORATE SOURCE:

Pharm. Inst., Freie Univ. Berlin, Berlin, Fed. Rep.

Ger.

SOURCE:

Pharmaceutica Acta Helvetiae (1989), 64(12), 338-44

CODEN: PAHEAA; ISSN: 0031-6865

DOCUMENT TYPE:

Journal

LANGUAGE:

German

AB The mol. properties of quinidine, EO 122, and lidocaine were investigated using theor. mol. modeling. The binding patterns of the mols. were investigated by calculating interaction energies with a neg. charged fragment (receptor model). Based on these calcus. a model for the differentiation of class Ia and class Ib antiarrhythmic drugs could be deduced. The results fit the modulated receptor hypothesis. The mol. basis for the preferred affinity of quinidine to the open state of the sodium channel and the equal affinity of lidocaine to the open and inactivated state of the channel were defined.

IT 23581-62-6, EO-122

RL: BIOL (Biological study)

(mol. modeling of heart sodium channel receptor interaction with)

RN 23581-62-6 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(2,6-dimethylphenyl)-,

/

ANSWER 7 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1989:400428 CAPLUS

DOCUMENT NUMBER:

111:428

TITLE: .

The specific binding of [3H]EO-122, a radiolabeled class I antiarrhythmic drug, to rat heart membranes

AUTHOR(S):

Oppenheimer, Edna; Meiri, Hamutal; Ori, Yaacov

Sackler Fac. Med., Tel Aviv Univ., Ramat Aviv, 69978, CORPORATE SOURCE:

Israel Journal of Molecular and Cellular Cardiology (1989),

21(2), 223-30

CODEN: JMCDAY; ISSN: 0022-2828

DOCUMENT TYPE:

Journal

LANGUAGE:

SOURCE:

English

GI

Ι

[3H]EO-122 (I), a radiolabeled class I antiarrhythmic drug, was used to characterize a new specific binding system to rat heart membranes. binding was saturable and competitive with unlabeled EO-122 and other antiarrhythmic drugs. In this system, [3H]EO-122 bound to 2 sites: site A with an apparent Kd of 33.5 nM, Bmax of 1.05 pmol/mg protein and Hill coefficient nH = 4 and site B with an apparent Kd of 233 nM, Bmax of 5.7 pmol/mg protein and nH = 6. The binding to site B indicates that this site is pharmacol. relevant to known class IA antiarrhythmic drugs such as quinidine and procainamide. Lidocaine (class IB) did not interact with this site. Interpretation of the high Hill coefficient suggests that the binding of an antiarrhythmic drug to its pharmacol. relevant binding site exposes addnl. binding sites and/or modulates the affinity of adjacent binding sites.

IT 23581-62-6, EO 122

RL: PROC (Process)

(binding of, by heart membrane)

23581-62-6 CAPLUS RN

1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(2,6-dimethylphenyl)-, CN monohydrochloride (9CI) (CA INDEX NAME)

120949-68-0P IT

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and binding by heart membrane of)

RN120949-68-0 CAPLUS

1-Azabicyclo[2.2.2]octane-2,3-t2-3-carboxamide, N-(2,6-dimethylphenyl)-, CN monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & T & Me \\ \hline & C - NH \\ \hline & Me \\ \end{array}$$

#### HC1

ANSWER 8 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1987:611641 CAPLUS

DOCUMENT NUMBER: 107:211641

TITLE: Electrophysiological effects of a novel antiarrhythmic

drug, EO-122, on guinea pig ventricular muscle and

isolated myocytes

Binah, Ofer; Gilat, Eran; Rubinstein, Irit; AUTHOR(S):

Oppenheimer, Edna

CORPORATE SOURCE: Rappaport Family Inst. Res. Med. Sci., Fac. Med.,

Haifa, 31096, Israel

Journal of Cardiovascular Pharmacology (1987), 10(3), SOURCE:

301-8

CODEN: JCPCDT; ISSN: 0160-2446

DOCUMENT TYPE: Journal

LANGUAGE: English GI

CONH @ HCl Мe

The effects of EO-122 (I) on the electrophysiol. properties of guinea pig papillary muscle and ventricular myocytes were investigated by means of

standard microelectrode and whole-cell recording techniques, resp. At the concentration range of 10-7-10-4 M (cycle length, 2000 ms), resting potential

and

action potential duration (APD90) were not altered by the drug. Action potential amplitude and APD50 were reduced by 10-4 M, and Vmax was reduced by EO-122  $\geq$ 10-5 M. The effect of EO-122 on Vmax was use-dependent. At 10-6 and 10-5 M (cycle length, 2000 ms), the time constant for onset of block (ton) was 37.0 and 26.0 s, resp. The recovery kinetics from use-dependent block was not monoexponential, and the estimated "time constant" for recovery was 76.5 s. The effects of EO-122, 10-5 M on the membrane currents in ventricular myocytes were examined and it was found that the drug attenuated the slow inward current (Isi). The present study demonstrates that EO-122 blocks both the fast inward (Na+) and the slow inward (Ca2+) channels, and these effects are probably responsible for the antiarrhythmic effects of the drug.

IT 23581-62-6, EO-122

RL: BIOL (Biological study)

(heart elec. activity response to, antiarrhythmic mechanism in relation

RN 23581-62-6 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(2,6-dimethylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

# ● HCl

ANSWER 9 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1981:424851 CAPLUS

DOCUMENT NUMBER:

95:24851

TITLE:

Process for the preparation of quinuclidine carboxylic

acid derivatives

PATENT ASSIGNEE(S):

Mundipharma A.-G., Switz.

SOURCE:

Brit., 3 pp. Division of Brit. 1,578,421.

CODEN: BRXXAA

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
GB 1578422	·A	19801105	GB 1979-21014		19780119
IL 51296	Α	19831031	IL 1977-51296		19770119
GB 1578421	Α	19801105	GB 1978-2197		19780119
PRIORITY APPLN. INFO.:	•		IL 1977-51296	Α	19770119
			GB 1978-2197		19780119

Cl-

AB The title compds. I (R, R1 = H, halo, C1-6 alkyl) were prepared by treating a quinuclidinecarboxylate II or its acid addition salts with H2NC6H3RR1 (R, R1 as before) in anhydrous alc.-free CHCl3 containing (COCl)2. E.g., 2.5 g of the HCl addition salt of II (CO2H group in 3-position) was refluxed 3 h in 150 mL anhydrous alc.-free CHCl3 containing 10 mL (COCl)2, then treated with 3

g
H2NC6H3Me2-2,6 in 100 mL CHCl3 (reflux, 6 h) to give, after work-up, 3 g
(91%) III. III has useful antiarrhythmic properties (no data).

III

IT 23581-62-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, of, as antiarrhythmic)

RN 23581-62-6 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(2,6-dimethylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

## HCl

L4 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1980:561251 CAPLUS

DOCUMENT NUMBER:

93:161251

TITLE:

A preclinical study of EO-122, a new lidocaine-like

antiarrhythmic drug

AUTHOR(S):

Oppenheimer, Edna; Kaplinsky, Eliezer; Kariv, Naam;

Bruckstein, Rachel; Cohen, Sasson

CORPORATE SOURCE:

Sackler Sch. Med., Tel-Aviv Univ., Kfar Saba, Israel

Angiology (1980), 31(6), 410-26

CODEN: ANGIAB; ISSN: 0003-3197

DOCUMENT TYPE:

Journal

LANGUAGE:

SOURCE:

English

GI

Restoration of normal sinus rhythm and suppression of ouabain-induced AB arrhythmia in cats and dogs, and of coronary occlusion-induced arrhythmia in dogs, followed a single i.v. injection of 1-3 mg EO 122 (I) 23581-62-6]/kg, with an onset of 2 min and a duration of 20-240 min. Occlusion-induced arrhythmia was also suppressed after an oral dose of 10-20 mg/kg, with an onset of 11-65 min and a duration of 25-120 min. Under similar conditions, lidocaine was either totally ineffective or of ultra-short duration. The bioavailability of EO-122 by the oral route exceeded 80% of the oral dose. Therapeutic blood concns. were in the range 0.5-7 μg/mL. At about 5 μg/mL, there was a slight depression of cardiac function in the anesthetized cat, but not in the conscious dog. In cats, complete A-V block occurred at concns. of 60-70 µg/mL. i.v. LD50 in mice was 22 mg/kg and in rabbits 8.5 mg/kg. No overt signs of neurotoxicity could be observed at any dose of EO-122. The pharmacokinetic profile of the drug fits a two-compartment open model, with t1/2 .simeq.150 min.

IT 23581-62-6

RL: BIOL (Biological study)

(heart arrhythmia response to)

RN 23581-62-6 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(2,6-dimethylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

#### HCl

ANSWER 11 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1979:92467 CAPLUS

DOCUMENT NUMBER:

90:92467

TITLE:

Solvent-caused quaternization as a possible source of error in the mass spectral quantitation of tertiary

amines. I. Methylene chloride quaternization

AUTHOR(S):

Vincze, Adam; Gefen, Leon

CORPORATE SOURCE:

Israel Inst. Biol. Res., Ness Ziona, Israel

SOURCE:

Israel Journal of Chemistry (1978), 17(3), 236-8

CODEN: ISJCAT; ISSN: 0021-2148

DOCUMENT TYPE:

Journal

LANGUAGE:

English

GΙ

Ι

AB Basic tertiary amines such as atropine (I) [51-55-8] and derivs. of N-methylpiperidine and quinuclidine, tend to quaternize in CH2Cl2 [75-09-2] at room temperature The quaternary ammonium salts formed undergo various dequaternization reactions in the heated direct inlet probe of the mass spectrometer, giving rise to volatile tertiary amines that are different from the starting material and usually having higher mol. wts. Recorded spectra of such samples are a superposition of those of the various tertiary amines constituting the mixture If just a few relevant and abundant ions in the mass spectrum of the original tertiary amine are monitored, as in quant. fragmentog. rather low results might be obtained. Moreover, the operator may be quite unaware of the fact that only part of the sample is being measured.

IT 69267-68-1

> RL: RCT (Reactant); RACT (Reactant or reagent) (methylene chloride quaternization of, mass spectroscopic error in relation to)

RN 69267-68-1 CAPLUS

1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(2,6-dimethylphenyl)- (9CI) CN (CA INDEX NAME)

ANSWER 12 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

1978:546786 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

89:146786

TITLE:

Antiarrhythmic quinuclidine carboxylic acid xylidide Oppenheimer, Edna; Kaplinsky, Eliezer; Cohen, Sasson

PATENT ASSIGNEE(S):

Mundipharma A.-G., Switz.

SOURCE:

Ger. Offen., 24 pp.

DOCUMENT TYPE:

INVENTOR(S):

CODEN: GWXXBX Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE	2802208	A1	19780720	DE 1978-2802208	19780119
IL	51296	Α	·19831031	IL 1977-51296	19770119
zA	7707476	Α	19781025	ZA 1977-7476	19771215
FI	7703923	. <b>A</b>	19780720	FI 1977-3923	19771223
ES	465827	A1	19790101	ES 1978-465827	19780107
SE	7800204	Α	19780720	SE 1978-204	19780109
SE	443786	В	19860310		
SE	443786	С	19860619		
ΑU	7832489	Α	19790726	AU 1978-32489	19780117
ΑU	519089	B2	19811105		
DK	7800264	Α	19780720	DK 1978-264	19780118

DK 147180	В	19840507			
DK 147180 ·	C	19841112			
NO 7800177	Α	19780720	NO 1978-177		19780118
NO 148335	B	19830613	•		
NO 148335	С	19830921			
FR 2384499	A1	19781020	FR 1978-1354		19780118
FR 2384499	B1	19811030			
AT 7800353	Α	19790815	AT 1978-353		19780118
AT 355586	. B	19800310			
CA 1107734	A1	19810825	CA 1978-295163 .		19780118
JP 53109952	Α .	19780926	JP 1978-4764		19780119
JP 63008111	В	19880219			•
PRIORITY APPLN. INFO.:			IL 1977-51296	Α	19770119
OTHER SOURCE(S):	MARPAT	89:146786	_		
GT					

AB The title compound (I) was prepared in 91% yield by treating 3-quinuclidinecarboxylic acid-HCl with oxalyl chloride and 2,6-Me2C6H3NH2. I has superior antiarrhythmic activity to lidocaine. The 2-quinuclidine analog of I is inactive and neurotoxic.

IT 23581-62-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antiarrhythmic activity of)

RN 23581-62-6 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(2,6-dimethylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

## HCl

L4 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1970:78905 CAPLUS

DOCUMENT NUMBER: 72:78905

ORIGINAL REFERENCE NO.: 72:14365a,14368a

TITLE: 2 (and 3) - Quinuclidine carboxanilides

INVENTOR(S): Sandberg, Rune V.; Sjoberg, Berndt O. H.; Tegner,

Claes P.

PATENT ASSIGNEE(S): Aktiebolag Astra

SOURCE:

Fr., 7 pp.

CODEN: FRXXAK

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	FR 1566045		19690502	FR	19680522
	DE 1770414			DE	
	FR 7713			FR	
,	GB 1176757			GB .	•
	SE 331841			SE	
	US 3579523		19710518	<b>US</b>	19680517
	US 3726980		19730410.	US ·	19701026
PRIC	RITY APPLN. INFO.:			SE	19670523
OTHE	R SOURCE(S):				
GI	For diagram(s), see	-		•	
AB	<del></del>			have antiarrhythmic and	
				derivs. of quinucliding	
	<del>-</del>			1954). Thus, a mixtu	_
				oluidine, and 0.1 g Na	was kept 5 hr
				(R1 = H, R2 = Me), m.	
				prepared were the follow	
				- [base m. 117-19.5° (a	aqueous
	EtOH)]; Me, Me, 223			Also prepared were II	/D ==
				II $(R = H)$ , m. $178-80^{\circ}$	(R -
	(MeCOBu-iso).	(Mecobi	1-150), and 1	II (R - H), m. 170-00	•
IT	26801-43-4P 26801-4	14-5p			
11	RL: SPN (Synthetic		ation): PREP	(Preparation)	

(preparation of)

26801-43-4 CAPLUS RN

CN 3-Quinuclidinecarboxanilide, 2'-chloro- (8CI) (CA INDEX NAME)

RN 26801-44-5 CAPLUS

CN 3-Quinuclidinecarboxanilide (8CI) (CA INDEX NAME)

ANSWER 14 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1969:461176 CAPLUS

DOCUMENT NUMBER: 71:61176

ORIGINAL REFERENCE NO.: 71:11251a,11254a

TITLE: AUTHOR(S):

Some derivatives of quinuclidine-3-carboxylic acids

Dahlbom, Richard; Dolby, Jorgen

CORPORATE SOURCE:

Farm. Fak. Stockholm, Stockholm, Swed.

SOURCE:

Acta Pharmaceutica Suecica (1969), 6(2), 277-82

CODEN: APSXAS; ISSN: 0001-6675

DOCUMENT TYPE:

Journal English

LANGUAGE:

English

GI For diagram(s), see printed CA Issue.

AB Me dehydroquinuclidine-3-carboxylate-HCl (Ia.HCl) (2.4 g.) in 20 ml. 33% aqueous MeNH2 was kept 48 hrs. at room temperature, and worked up to give 54% I (R =

NHMe), m. 201-2°. Other amides similarly prepared were as follows [compound type, R (or R and R1), % yield, salt, and m.p. salt given]: II, NHMe, H, 47, HCl, 229-30°; II, NHEt, H, 40, HCl, 270-1°; I, NHEt, 63, oxalate, 169-72°; I, NHPr, 69, oxalate, 112-15°; and I, NHBu, 71, oxalate, 98-102°. Me quinuclidine-3-carboxylate-HCl (2.1 g.) in 20 ml. 20% HCl was refluxed 15 hrs., dried, 15 ml. SOC12 added, the mixture refluxed 3 hrs. and dried, 2.4 g. 2,6-Me2C6H3NH2 was added dropwise, 2.7 g. K2CO3 and 20 ml. CHCl3 were added, and the mixture refluxed 3 hrs. and worked up to give 60% II.HCl (R = 2,6-Me2C6H3NH, R1 =H), m. 236-8°. The following compds. were similarly prepared [compound type, R (or R and R1), % yield, salt, and m.p. salt given]: II, pyrrolidine, H, 48,-(free base), 99-100°; I, NMe2, 54, HCl, 180-2°; I, NEt2, 32, HCl, 168-70°; I, pyrrolidino, 39,-(free base), 87-8.5°; I, piperidino, 36, HCl, 183-4°; II, 2-MeC6H4NH, H, 55,-(free base), 169-70°; II, 2,6-MeClC6H3NH, H, 52, HCl, 226-8°; I, 2-MeC6H4NH, 49, HCl, 208-9°; I, 2,6-Me2C6H3NH, 45, HCl, 247-8°; and II, 2,6-MeClC6H3NH, 52, HCl, 236-7°. Ia was added to a solution of Na in the appropriate amino alc., and the mixture heated 6 hrs. at 70°/100 mm. to give the following II (R, R1, % yield, and m.p. given): O(CH2)2NMe2, OH, 73, 103-5°; O(CH2)2NEt2, OH, 73, 73-4.5°; pyrrolidinoethoxy, OH, 79, 90-1.5°; and piperidinoethoxy, OH, 82, 100-2°. III were prepared by treating the appropriate amino esters in Me2CO with MeI. The salt separated almost immediately and was collected and recrystd. from 90% EtOH. The following III were prepared (R, % yield, and m.p. given): NMe3, 95, 239-40°; NMeEt2, 92, 249-50°; N-methylpyrrolidino, 95, 247-8°; and N-methylpiperidino, 89, 248-9°. All the compds. were tested for pharmacol. and microbiol. activities, but showed no appreciable effects.

applectable effects.

IT 23581-62-6P 23581-63-7P 23692-14-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 23581-62-6 CAPLUS

CN 1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(2,6-dimethylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

## ● HCl

RN 23581-63-7 CAPLUS

CN 3-Quinuclidinecarboxy-o-toluidide, 6'-chloro-, monohydrochloride (8CI) (CA INDEX NAME)

23692-14-0 CAPLUS RN1-Azabicyclo[2.2.2]octane-3-carboxamide, N-(2-methylphenyl)- (9CI) (CA CN INDEX NAME)

# => d his

(FILE 'HOME' ENTERED AT 16:47:33 ON 17 OCT 2007)

FILE 'REGISTRY' ENTERED AT 16:47:45 ON 17 OCT 2007

STRUCTURE UPLOADED L1

L23 S L1

L3 80 S L1 FULL

FILE 'CAPLUS' ENTERED AT 16:48:20 ON 17 OCT 2007

L414 S L3 FULL

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	74.72	247.03
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-10.92	-10.92

STN INTERNATIONAL LOGOFF AT 16:49:24 ON 17 OCT 2007

# **EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	493	(546/133,514/305).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/10/17 17:03
L2	78	I1 and quinuclidin	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/10/17 17:04
L3	. 1	l2 and acetylcholin	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/10/17 17:04
L4	26	I2 and nicotinic	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/10/17 17:04